



2016 PACIFIC COAST STEELHEAD MANAGEMENT MEETING

ASILOMAR CONFERENCE GROUNDS PACIFIC GROVE, CALIFORNIA MARCH 8-10, 2016

Monday, March 7, 2016

3:00 – 6:00 pm	REGISTRATION/MEAL TICKETS - CHAPEL
6:00 – 7:00 pm	DINNER – CROCKER DINING HALL – PICKUP TICKETS AT REGISTRATION

Tuesday, March 8, 2016

6:00 – 8:00 am	REGISTRATION/MEAL TICKETS - CHAPEL
7:30 – 8:15 am	BREAKFAST – CROCKER DINING HALL
8:15 – 8:30 am	Welcome, Introductions & Housekeeping Items Roger Harding, ADF&G and Stephen Phillips, PSMFC
8:30 – 10:30 am	Session One - 20 Minute Presentations Steelhead Stock Status Review - Chair: Jonathan Nelson <ul style="list-style-type: none"> • 8:30 California - Jonathan Nelson • 8:50 Oregon - Rod French • 9:10 Idaho - Brett Bowersox • 9:30 Washington - Jeremy Cram • 9:50 British Columbia – Mark Beere • 10:10 Alaska – Brian Marston
10:30 – 10:45 am	BREAK - 15 MINUTES
10:45 – 5:00 pm	Session Two - Management Session – Chair: Brian Marston 10:45 - Modeling impacts of summer and winter steelhead catch and release sport fisheries - Kale Bentley, WDFW 11:05 – Morphometric variation among four distinct population segments of California steelhead trout - Farhat Bajjaliya, CDFW 11:25 - Research and Monitoring Endangered Southern California Steelhead: What Is a Southern California Steelhead? - Dana McCanne, CDFW 11:45 - Managing for diversity in <i>Oncorhynchus mykiss</i> : principles and challenges for implementation - Matt Sloat and Gordie Reeves, FS WSC
12:05 – 1:10 pm	LUNCH - CROCKER DINING HALL
	1:10 - Managing ESA listed O. mykiss in the presence of multiple life history strategies. James Losee, Joseph Anderson, Lance Campbell, Andrew Claiborne, Matt Kungle WDFW 1:30 - Alternative smolt rearing enables use of local natural-origin steelhead broodstock – Christopher Tatara, NOAA 1:50 - Group Discussion Session Two continued -

	<p>2:10 - Retrospective Analysis of a Natural-Origin Steelhead Population's Response to Exclusion of Hatchery Fish - Ian Courter, Mount Hood Environmental</p> <p>2:30 - Steelhead Hatchery – Wild Introgression in Puget Sound, WA - Ken Warheit, WDFW</p> <p>2:50 - The San Clemente Dam Removal & Carmel River Reroute Project: a unique approach to dam removal - Kevan Urquhart, MPWMD</p>
3:10 - 3:25 pm	BREAK - 15 MINUTES
	<p>3:25 - Genomic Adaptation and Conservation and Management of Life-History Variation - Devon Pearse, NMFS SWFSC</p> <p>3:45 - Elwha River Response to Dam Removals Through 4 Years and a 30-Year-Flood – <i>'Lessons learned, channel response and sediment effects from the world's largest engineered dam removal'</i> - Andy Ritchie, NPS</p> <p>4:05 - Steelhead Kelt Reconditioning and Reproductive Success Studies in the Columbia River Basin - Doug Hatch, CRITFC</p> <p>4:25 - Do we need to manage for iteroparity in steelhead trout - Zach Penney, CRITFC</p> <p>4:45 - Summary/Discussion/Questions</p>
5:00 pm 6:00 pm	ADJOURN DINNER – CROCKER DINING HALL – NO-HOST RECEPTION
7:30 pm	<p>Poster Session – Chapel - Chair: Leslie Alber, CDFW</p> <ol style="list-style-type: none"> 1. Ocean Ranch Unit Restoration Planning, Eel River Estuary, CDFW Eel River Wildlife Area - Michelle Gilroy, CDFW 2. California Department of Fish & Wildlife's Steelhead Report and Restoration Card Program: Past, Present, and Future - Farhat Bajjaliya, CDFW 3. Central Valley Steelhead Monitoring Program - Don Baldwin, Sam Plemons, and Brian Poxon, CDFW 4. Southern California Steelhead: DIDSON deployments to date and implications for future research and management - Katherine D. McLaughlin, Sam Bankston and Mary Larson, CDFW 5. Estimating the Number of Steelhead Smolts Leaving the San Joaquin River using Acoustic Data - Gretchen Murphey, CDFW 6. Effects of mid 2010's Drought on <i>O. mykiss</i> in the lower Merced River – Domenic Giudice, CDFW 7. Downstream migration success of Feather River Fish Hatchery steelhead smolts under different release strategies - Ryon Kurth, CDWR 8. Life on the edge: Temperature and flow restrict steelhead productivity in a large Central Valley, California river – Rob Titus, CDFW 9. Assessing the effects of drought conditions on Central Valley steelhead fishing – Erin Ferguson and James Lyons, CDFW 10. A high-resolution map of summer stream temperatures throughout the US steelhead range – Dan Isaak, USFS 11. Winter Steelhead Monitoring in Western Oregon: Converting Redds to Fish – Matt Weeber, ODFW 12. Monitoring steelhead fisheries and fish abundance in the Situk River, Alaska – Brian Marston, ADFG 13. Adult Winter steelhead Response to the 2014 Oso Landslide – Bethany Craig, Peter Verhey, Jennifer Whitney, WDFW <p>Poster Session Continued:</p>

	14. Growth potential of <i>Oncorhynchus mykiss</i> in the Duckabush and Hamma Hamma Rivers – Gary Marston, WDFW 15. Wild Steelhead Management Zones in Washington State – Christina Iverson, WDFW 16. Central Valley Passive Integrated (PIT) Tag Array Feasibility Study – Dave Rundio, NOAA 17. PIT tags in the stream: tracking genuine fish movement or rogue tags? – Kerrie Pipal, NOAA 18. Scale aging of Central Valley Steelhead reveals life-history difference between stocks - Lea Koerber, CDFW
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Wednesday, March 9, 2016

7:00 – 8:00 am	REGISTRATION – CHAPEL
7:30 – 8:15 am	BREAKFAST – CROCKER DINING HALL
8:15 – 10:55 am	<p>Session Three - Implications for Managing steelhead in an evolving environment: Ocean Ecology - Session Chairs: Bob Leland and Nate Mantua</p> <p>8:15 - Retrospective analysis of Puget Sound steelhead SAR that includes comparisons to other regions and correlated environmental variable - Neala Kendall, WDFW – Presented by Erik Neatherlin, WDFW</p> <p>8:35 - Freshwater and marine prevalence of Nanophyetus infections in Puget Sound – Martin Chen, Long Live the Kings</p> <p>8:55 - Decoupling freshwater and marine effects on the early marine survival of steelhead through Puget Sound - Megan Moore, NWFSC</p> <p>9:15 - Harbor seal-steelhead interactions - Barry Berejikian, NWFSC</p> <p>9:35 - Genome wide association study (GWAS) results for steelhead smolt survival in Puget Sound - Ken Warheit, WDFW</p>
10:00 – 10:15 am	BREAK – 15 MINUTES
10:55 – 2:00 pm	<p>10:15 - El Niño, the Blob and Ocean Conditions - Nate Mantua, SWFSC</p> <p>10:35 - Half pounders, Climate Change and Blob, blob, blob – Sean Hayes, SWFSC</p> <p>Session Four - Implications for Managing steelhead in an evolving environment: Drought - (5 minute introduction): Bob Leland and Nate Mantua</p> <p>11:00 - “Overview of California drought and implications to steelhead management” - Stafford Lehr, CDFW</p> <p>11:20 - Wettedness surveys and steelhead (<i>O. mykiss</i>) rescues during two drought years in Southern California - Ben Lakish, CDFW</p> <p>11:40 - Development and use of high-resolution NorWeST stream and river temperature climate scenarios for steelhead assessments – Dan Isaak, USFS</p>
NOON - 1:00 PM	LUNCH – CROCKER DINING HALL
1:40 – 4:40 pm	<p>1:00 - Changes in production of yearling and two years old steelhead trout smolts during drought conditions in a Northern California Stream - Mike Sparkman, CDFW</p> <p>1:20 - Discussion / Questions / Summary: Ocean Ecology and Drought sessions</p> <p>Session Five “Steelhead Life History” - Session Chairs: Dan Rawding and Tommy Williams</p>

	1:40 - Genetic tagging of California Central Valley hatchery steelhead reveals patterns of migration and reproduction - Carlos Garza, NMFS SWFSC 2:00 - Repeat spawning, spawning survival, and reproductive behavior of steelhead (<i>Oncorhynchus mykiss</i>) in a small coastal California stream - Seth Ricker, CDFW 2:20 - Life-history diversity and ecology of <i>O. mykiss</i> in coastal California coastal watershed - Thomas Williams, NMFS SWFSC
2:40 – 3:00 pm	BREAK – 20 MINUTES
3:00 – 4:40 pm	3:00 - Restoration of anadromy - Corey Phillis, Metropolitan Water District 3:20 - The influence of geomorphology and hydrology on <i>O. mykiss</i> life history zonation in streams - Suzanne J. Kelson, UC Berkeley, Michael Mill UC Davis and Stephanie Carlson, UC Berkeley 3:40 - Using individual life history modeling to inform management - Juan Lopez, UC Santa Cruz 4:00 - Informing Puget Sound steelhead recovery plans with a life cycle model – Phil Sandstrom, WDFW 4:20 - Using physiological indices to forecast life-history in hatchery reared winter-run steelhead trout, <i>Oncorhynchus mykiss</i> in Hood River, OR – Don Larsen, NOAA 4:40 - The Effect of Experimental Hatchery Manipulations on Wild Broodstock Steelhead (<i>Oncorhynchus mykiss</i>) Growth and Behavior - Katharine E. Self, OSU Karen Cogliati, OSU and David L.G Noakes, OSU
5:00 PM 6:00 PM 7:00 PM	ADJOURN DINNER – CROCKER DINING HALL EVENING SPEAKER AND ENTERTAINMENT – SEASCAPE DINING ROOM THE HALF-POUNDER, A STEELHEAD TROUT - DENNIS P. LEE, CDFW (RETIRED)

Thursday, March 10, 2016

7:30 – 8:15 am	BREAKFAST – CROCKER DINING HALL
8:15 – 11:40 am	Session Six - Invited Papers - Session Chairs: Dan Rawding and Tommy Williams 8:15 - Using sonar cameras to monitor southern California steelhead in Santa Barbara and Ventura Counties - Sam Bankston, PSMFC 8:35 - Use of flow enhancement to improve late-summer rearing habitat for juvenile steelhead in the Potlatch River, ID - Brian Knoth, IDFG 8:55 - Wild Central Valley steelhead still persist in Mill Creek: Results of Recent Adult Escapement and Run Timing Information Obtained Using a Video Monitoring System - Matthew Johnson, CDFW 9:15 - Survival rates of steelhead released from a Columbia River seine fishery – Dan Rawding, WDFW 9:35 - Using hierarchical models to estimate management reference points for coastal steelhead populations in Washington - Thomas Buehrens, WDFW 9:55 - Reducing bias in pHOS in a world with hatchery hot spots – Eric Brown, ODFW
10:15 – 10:30 am	BREAK – 15 MINUTES
	10:30 - Marine subsidy contributions to steelhead diet - Alison Collins, Metropolitan Water District 10:50 - Statewide Washington steelhead SNP baseline development - Todd Seamons, WDFW

	<p>11:10 - Detecting anadromy in <i>Oncorhynchus mykiss</i> and <i>Salvelinus confluentus</i> by non-lethal sampling techniques - Lance Campbell, WDFW</p> <p>11:30 - Steelhead life history diversity in Puget Sound Rivers - Clayton Kinsel, WDFW</p> <p>11:50 - Effects of early vertical sorting behavior on mean family body size in hatchery reared steelhead – Neil Thompson and Michael Blouin, OSU</p> <p>12:10 – 12:15 – Wrap Up and Closing Remarks: Roger Harding, ADF&G and Stephen Phillips, PSMFC</p>
12:15 am	LUNCH – CROCKER DINING HALL